



LIVE FIRE LEADER BRIEFING

NATIONAL TRAINING CENTER

www.irwin.army.mil/dragon/index.htm



- **Task: Conduct an overview of Live Fire ROE, Live Fire prerequisites, and Live Fire safety to the BCT leadership**
- **Conditions: Given the key BCT leadership and a one hour block of instruction**
- **Standard: All attending BCT leadership will be familiar with the highlights of Live Fire ROE, Live Fire prerequisites, and Live Fire safety**



LIVE FIRE

- Provide the most realistic and demanding Live Fire training possible
- Live Fire is not a range - OCs are not Range Safety Officers
- Unit responsibility
- Same force protection measures as actual combat

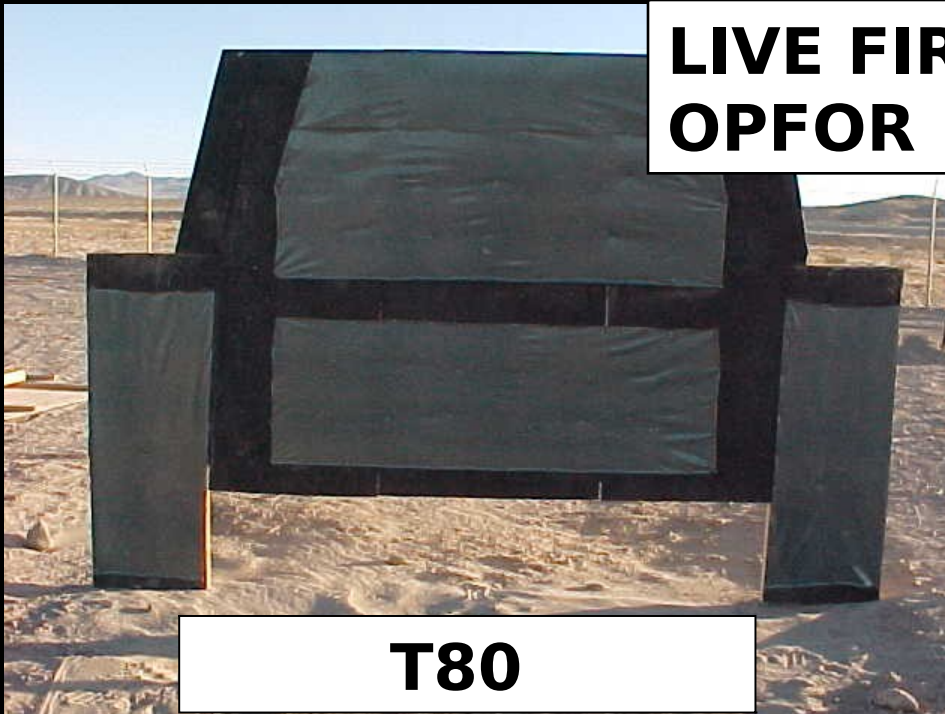


OBSERVER CONTROLLERS

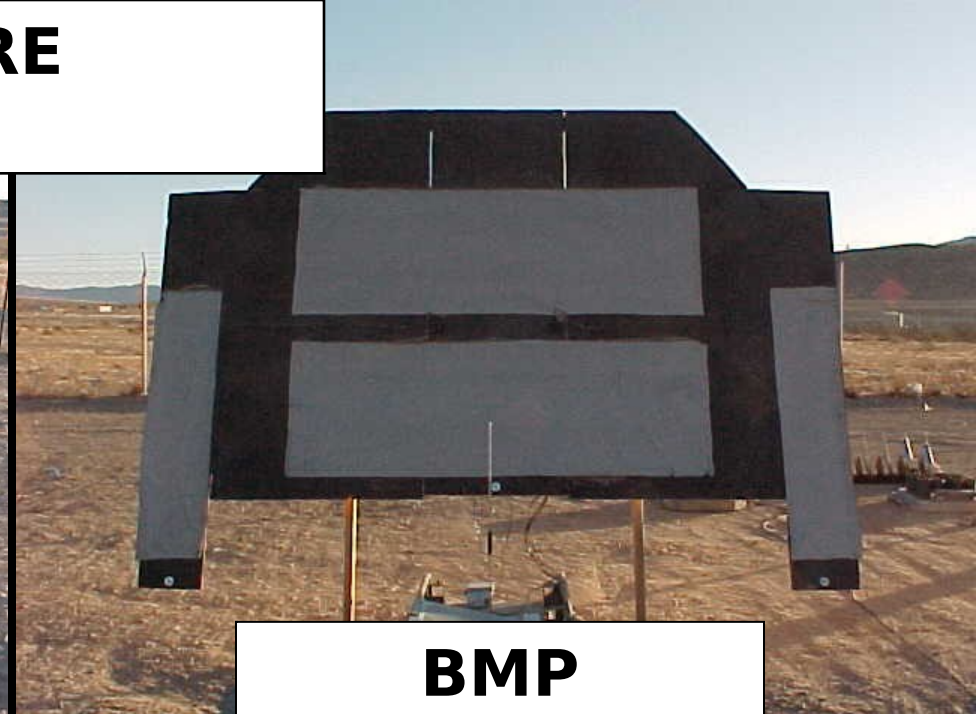


- Same as Force on Force
- Enforce the ROE
- Provide battlefield effects
- Assess BLUEFOR “kills” based on engagement ranges, LOS, reaction to contact, enemy capabilities and safety
- Dragon Team Live Fire trainers (52d DIV

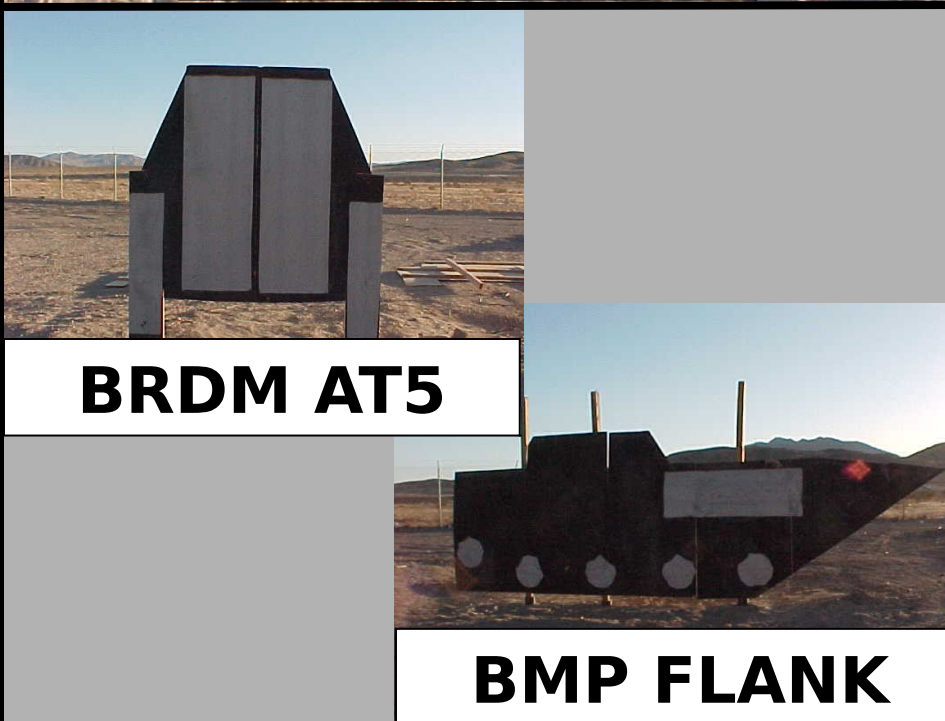
LIVE FIRE OPFOR



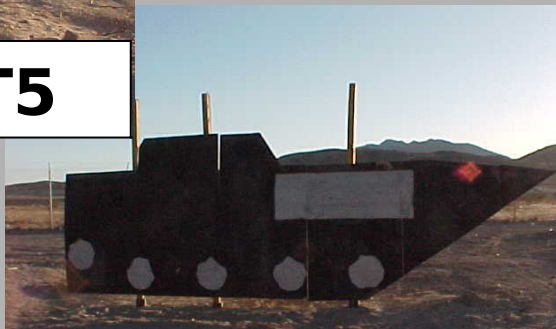
T80



**BMP
FRONTAL**



BRDM AT5



BMP FLANK

1600 (+)
area

- Stationary
- Reverse Polarity

- All ballistic hit detector (.50 cal & greater)
- All laser hit detector (TOW/Dragon/Javelin/AT4)

Controlled by UHF radio frequencies

- Controller boxes during offensive operations
- Live Fire Driver (Solaris computer) during defensive operations

LIVE FIRE OPFOR

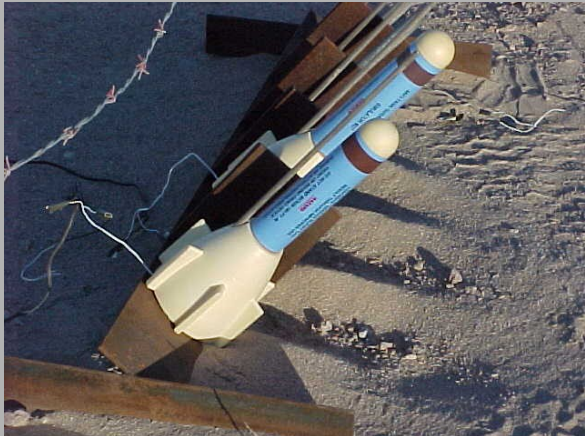


Dismounted Infantry

- over 200 targets
- 3D targets (wearing desert camouflage)
- Standard range infantry targets

Simulated Mortars

Weapons Effects/Simulations



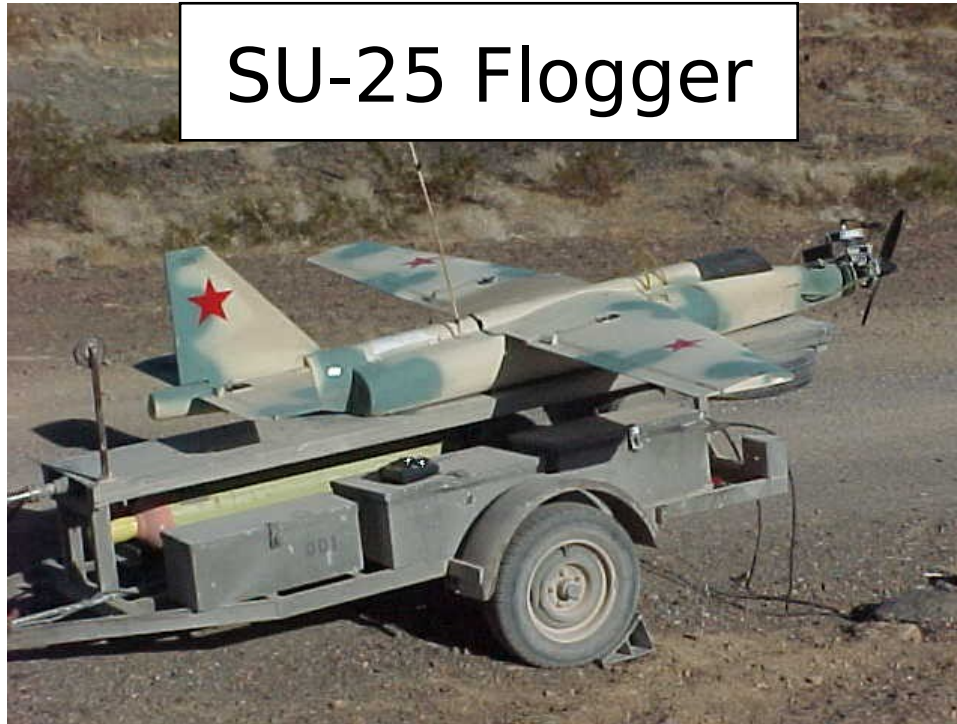
- Enemy direct fire - Hoffman
- A hit on enemy vehicle - Steel on steel
- Antitank/ADA systems - Smokey Sams



OPFOR AIR



SU-25 Flogger



Can be engaged by:

Live Stinger

Stinger MILES

All BCT weapons 25mm & below

MI-24 Hind



1/5 scale fixed & rotary wing



LIVE FIRE OPFOR

- **OPFOR Engineers**
 - *Mines employed (tan & blue)
 - *Wire obstacles employed (concertina)
(Do not breach barbed wire: off limits areas/live mines)
 - *ROE (same as Force on Force)
- **OPFOR Artillery**
 - *Eyes on BLUEFOR, BLUEFOR activity
 - *Casualties based on BLUEFOR reaction
 - *FASCAM - Yellow smoke
- **OPFOR NBC**
 - *ROE (same as Force on Force)
 - *Nonpersistent only



WEAPON SYSTEM PREREQUISITES



- Per FORSCOM 350-50-1, DA PAM 350-38, NTC ROE 1 NOV 01
- Waiver Requests due thru BCT CDR to O/C Team no later than RSOI 4 1500 hrs

Requires COG approval

Waiver request approvals are the exception



WEAPON SYSTEM PREREQUISITES



M1A1

- TTVIII w/in last 6 months (NOTE 1)
- **TC/GNR QUAL TOGETHER** (NOTE 1)
- 4 man crew (**19K**) (NOTE 2)

M2/M3/BSFV

- BTVIII w/in last 6 months (NOTE 1)
- **BC/GNR QUAL TOGETHER** (NOTE 1)
- 3 man crew (**11M or 19D**) (NOTE 3)

Reference: (1) FORSCOM 350-50-1, para 1-5a (3), 31 MAR 98

(2) NTC ROE, para 3-9 (6), 1 NOV 01

(3) NTC ROE, para 3-9 (7), 1 NOV 01



WEAPON SYSTEM PREREQUISITES



INDIVIDUAL

(NOTE 1)

WEAPONS

- Qualify IAW DA PAM 350-50-1 within six mos

Reference: (1) NTC ROE, para 3-9 (3a), 1 NOV 01



WEAPON SYSTEM PREREQUISITES



INFANTRY/

- Squad or platoon level LFX w/in last 6 mos

(NOTE 1)

SCOUT

- Units

who will clear trenches/bunkers must rehearse **SQUADS**
and demonstrate proficiency IAW FM 7-8 Battle Drills

(OC observed) (NOTE 2):

Battle Drill 1, Platoon Attack

Battle Drill 1A, Squad Attack

Battle Drill 5, Knock Out Bunkers

Battle Drill 7, Enter/Clear Trench

Battle Drill 8, Initial Breach of Wire/Mine Obstacle

Reference: (1) NTC ROE, para 3-9 (10a), 1 NOV 01

(2) NTC ROE, para 3-9 (10b-c), 1 NOV 01

**LIVE
FIRE**



WEAPON SYSTEM PREREQUISITES



OH-58D/AH-64
months

- Aircrews Table VIII qualified w/in 12

IAW FM 1-140 (NOTE 1)

- Collective live fire equivalent to Table X or

XII w/in

6 months (NOTE 2)

*** Table VIII w/in 6 months satisfies the
collective
training requirements**

UH-60/CH-47 - Door gunners qualified IAW FM 1-140
Appendix A w/in 6 months IAW FM 1-140 (NOTE 3)

Reference: (1) NTC ROE, para 3-9 (4a), 1 NOV 01 & FORSCOM 350-50-1, App F3a, 31
MAR 98

(2) NTC ROE, para 3-9 (4b), 1 NOV 01

(3) NTC ROE, para 3-9 (5), 1 NOV 01 FORSCOM 350-50-1, App F3b, 31 MAR

**LIVE
FIRE**



WEAPON SYSTEM PREREQUISITES



.50 CAL MG* - All qualifications w/in 6 months (NOTE 1)
M60 MG/M240B*
TOW

*** If weapons are mounted, a mounted Live Fire Exercise must have been conducted; this can be a familiarization and fired at the NTC (NOTE 1)**

Reference: (1) NTC ROE, para 3-9 (3e), 1 NOV 01



WEAPON SYSTEM PREREQUISITES



AT-4/Dragon/ Javelin

- Qualify on Table III and IV (NOTE 1)
- Have participated in a PLT/ Company EXEVAL w/in 6 months (NOTE 1)

Grenade

(NOTE 2)

months

- Have thrown a live Frag w/in 12 months
- Have negotiated a Grenade Course w/in 6

IAW FM 23-30 (NOTE 2)

Reference: (1) DA PAM 350-38, 3 JUL 97

(2) NTC ROE, para 3-9 (3c), 1 NOV 01



WEAPON SYSTEM PREREQUISITES



Mortars months

- Qualified to Live Fire Exercise standards w/in 6 months
- Have an EXEVAL w/in the last 6 months

60mm

- 3-man gun crew (2 X 11Cs)
- FDC (section leader & squad leader) are NCOs

81/107/120mm

- 4-man gun crew (3 X 11Cs)
- FDC of 4 men (3 X 11Cs)

Reference: NTC ROE, para 3-9 (3f), 1 NOV 01



WEAPON SYSTEM PREREQUISITES



Field Artillery - Command safety certified IAW DA PAM 385-63

M119

- Requires a 5-man howitzer crew

M109A3-A5

- Requires a 5-man howitzer crew

M109A6

- Requires a 4-man howitzer crew

M198

- Requires a 7-man howitzer crew

MLRS

- Requires at least a 2 man SPLL crew

Reference: NTC ROE, para 3-9 (3f), 1 NOV 01



WEAPON SYSTEM PREREQUISITES



Manpads Stinger

the STPT
scenarios or MTS reels w/in
drills

- Squad qualified 4 of 5 Hostile Presentations using either scenarios, IMTS 12 months
- Conducted and passed Stinger (ARTEP 44-117-11) w/in 3 months

Avenger/Linebacker

Hostile
the STPT
scenarios or MTS reels w/in
117-21-

- Squads qualified 4 of 5 Presentations using either scenarios, IMTS 12 months
- Qualified in all drills (ARTEP 44-Drill) w/in 3 months

Reference: DA PAM 350-38, 3 JUL 97 & NTC ROE, para 3-9 (11a-b), 1 NOV

01

LIVE
FIRE



WEAPON SYSTEM PREREQUISITES



MICLIC Bangalore Live Mines

- Live training w/in 12 months (NOTE 1)

Claymore disarmed inert (NOTE 2) Soldiers Manual of live mine 3 months

- Soldier emplaced, armed, and mine w/in 6 months IAW Common Tasks
- Squad emplaced, armed, and disarmed during squad or platoon LFX w/in

Reference: (1) NTC ROE, para 3-9 (3d), 1 NOV 01
(2) NTC ROE, para 3-9 (3b), 1 NOV 01



RULES OF ENGAGEMENT

- **Mandatory Drills/Briefings at NTC**

- Vehicle fire evacuation drills BCT Responsibility
- Vehicle rollover drills BCT Responsibility
- Misfire procedures BCT Responsibility
- Action in event of flareback (M1) BCT Responsibility
- View no power thermal (reverse polarity) targets BCT Responsibility
- Live Fire Safety Briefing
(all BCT soldiers/contractors/
Conducts
& all conducting Live Fire events) Dragon Team

Reference: NTC ROE, para 3-9 (8), 1 NOV 01



RULES OF ENGAGEMENT

- Special Equipment - General

- Body Armor.

1. All soldiers will deploy to the National Training Center with body armor per CTA 50-900 (NOTE 1).

2. Soldiers will wear body armor during all live fire events (NOTE 1).

Offense - worn not later than one hour prior to the earliest element's line of departure (LD) time.

Defense - worn not later than 1 hour prior to the defend time as specified in the OPORD.

3. Contractors will wear body armor prior to entering training area during Live Fire (NOTE 2)

References: (1) NTC ROE, para 3-10, 1 NOV 01

(2) NTC ROE, para 1-3, 1 NOV 01



RULES OF ENGAGEMENT

- Special Equipment - Dismounted Operations
 - Eye protection, hearing protection, and flak vest mandatory

Reference: NTC ROE, para 3-11 (2), 1 NOV 01



STRONGPOINT

GENERAL

- Usually daylight only (night on case-by-case)
- Must rehearse and demonstrate proficiency IAW FM 7-8 Battle Drills (OC observed):
 - * Battle Drill 1, Platoon Attack
 - * Battle Drill 1A, Squad Attack
 - * Battle Drill 5, Knock Out Bunkers
 - * Battle Drill 7, Enter/Clear Trench
 - * Battle Drill 8, Initial Breach of Wire/Mine Obstacle
- Lead man in trench marked

Reference: NTC ROE, para 3-11, 1 NOV 01



STRONGPOINT

DIRECT FIRE (NOTE 1)

- 5.56mm & 9mm only in trench
- Do not engage pneumatic firing devices
- No “point blank” firing into enemy firing ports within 25m
- No shooting out of the trench
- Muzzles pointed down when not firing
- M60s/M240Bs/.50cals tripod mounted with metal-to-metal contact (NOTE 2)
- Use proper SDZs (NOTE 2)

References: (1) NTC ROE, para 3-11, 1 NOV 01

(2) DA PAM 385-63



STRONGPOINT

DIRECT/INDIRECT FIRES RESTRICTIONS:

- Bravo Gap Trench:
Indirect Fires - 200m RFA for 155mm & above only
- Refrigerator Gap Trench:
Indirect Fires - 200m RFA for 155mm & above only

BANGALORE TORPEDOES:

- Must rehearse (OC observed)
- Use proper SDZ



STRONGPOINT

GRENADES

- Keep count of grenades
- Use only ammo pouches to carry grenades
- Grenades not attached to web gear on vehicles or helicopters (AR/DA PAM 385-63)
- No grenades outside of trench/bunkers
- Entering Trench (Battle Drill 7, FM 7-8)
 - * 2 Soldiers: feet to feet
 - * Grenades dropped
 - * Soldiers roll away and grabbed

Reference: NTC ROE, para 3-11 (2e), 1 NOV 01



STRONGPOINT

DUDS (indirect, grenade, AT4)

- Mark
- If dud is inside trench or within 5 meters then section of trench/bunker is off-limits (consider cleared of enemy)
- Unit soldier stands guard with OC
- AT4 dud must be located and destroyed before scenario continues
- Continue mission tactically
- BCT EOD under DIV control & on site at strongpoint

Reference: NTC ROE, para 3-11 (3-4), 1 NOV 01



STAKING REQUIREMENTS

Conditions

DAY

NIGHT_Security Force

No Staking Required

Staking Required

Note: If the Security Force falls back for the Main Defense they must be staked at the Main Battle positions. Must conduct reduced force rehearsals.

Main Battle Position

Staking Required

Staking Required

Reserve Force

No Staking Required

Staking Required

Note: The Reserve Force must rehearse its movement into the battle position under the conditions of the move. If it will

Reference NTC NDF para 2-10 (E) 1 NOV 01

move during daylight it must rehearse during daylight, if it



STAKING

- 3 stakes for deliberate/dug-in position
- 5 stakes for hasty position
- Limiting stakes not sector stakes

Dug - In Position

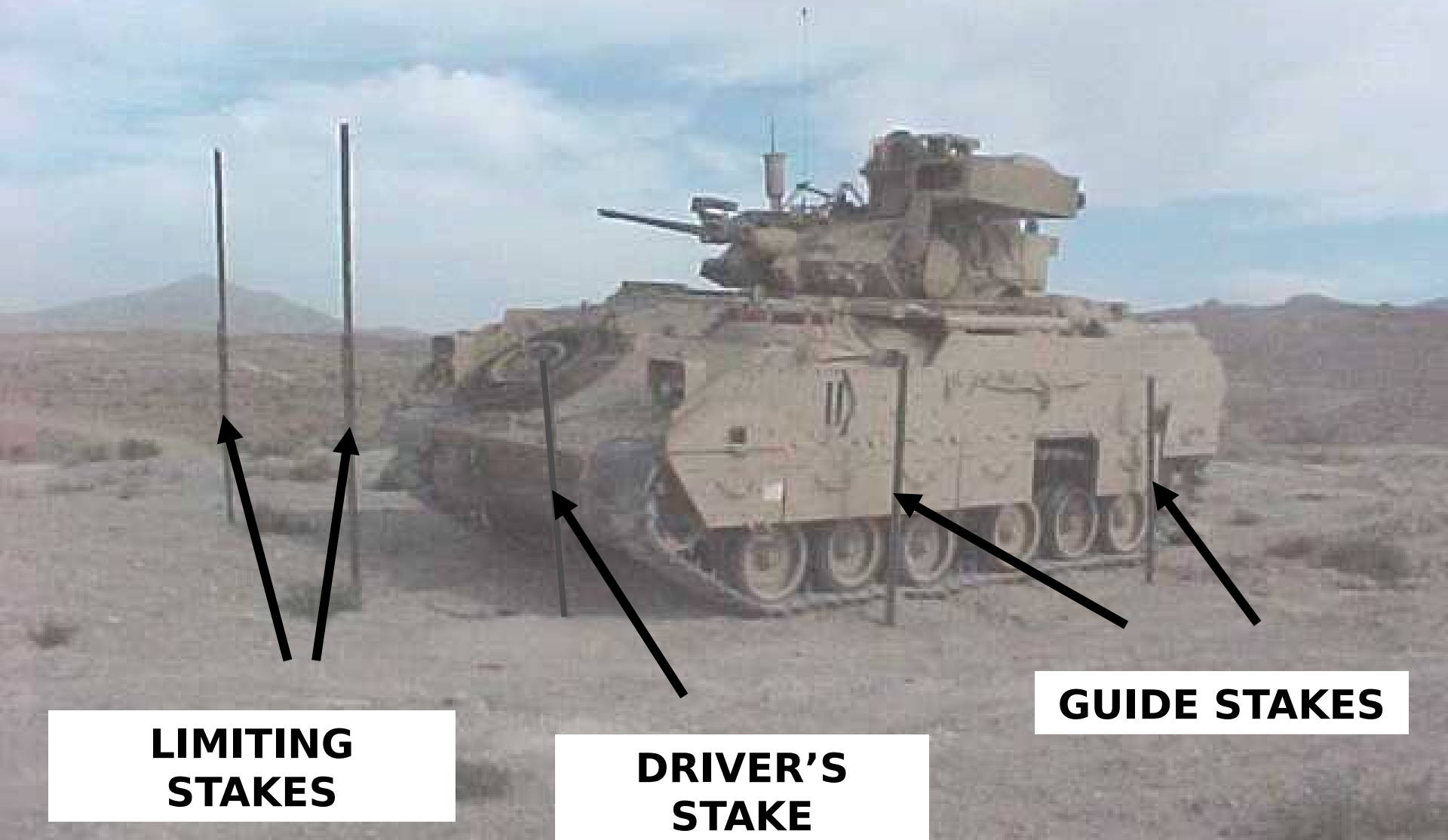


Hasty Position



Reference: NTC ROE, para 3-10 (3), 1 NOV 01

ABOVE GROUND POSITION STAKING REQUIREMENTS



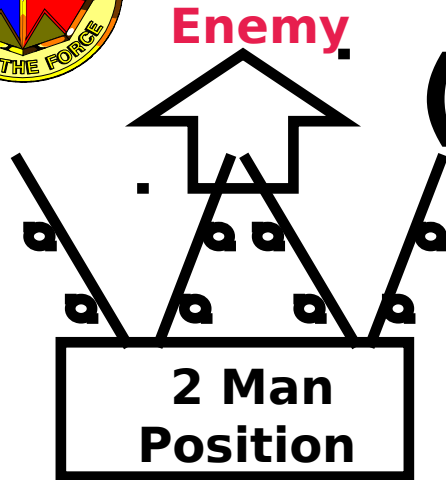
**LIMITING
STAKES**

**DRIVER'S
STAKE**

GUIDE STAKES



STAKING (DISMOUNT)



- Fighting position built IAW USAIS GTA 7-6-1
- Fighting Position Overhead Cover (FPOC)
IAW USAIS GTA 7-6-1
- 18 inches overhead cover (NOTE 1)
- Limiting stakes (4 per soldier)

Reference: (1) NTC ROE, para 5-7 (6b), 1 NOV 01

DISMOUNTED FIGHTING POSITION STAKING REQUIREMENTS





WEAPONS SAFETY POSTURE



- Weapons Safety Postures

- **Green and Clear:** All weapons clear and on electrical/mechanical safe
- **Green:**
Attack Helicopters: Tubes/launchers may be loaded; 30mm not visible in flex chute with gun cannon plug disconnected; M2 .50 cal (prior to take off, round in feed tray, master arm in STBY, gun switch safe, bolt to rear), otherwise unload
BFV 25MM: Electrical/mechanical safe, round in feeder, but ghost round not cycled
- **Red Direct:** Weapons systems loaded; electrical or mechanical safe on
- **Red Direct for Lasing:** Permission to use lasers
- **Red Indirect:** Permission to engage identified targets
- **Check Fire:** Cease all firing immediately; electrical safe engaged
- **Check Fire Freeze:** (FA/mortars only), cease firing immediately and evacuate all guns immediately
- **Cease Loading:** (FA/mortars only), continue firing current rounds in tube only; do not load additional ammunition

Reference: NTC ROE, para 3-12, 1 NOV 01



WEAPONS CONTROL STATUS

Used in conjunction with RED DIRECT

- Hold: Engage only if ordered to engage
- Tight: Engage only targets that are positively identified as enemy and gun target line cleared (5/9 Fingers)
- Free: Not an authorized Weapons Control Status at NTC

Reference: NTC ROE, para 3-12, 1 NOV 01

LIVE
FIRE



WEAPONS SAFETY POSTURE



Green and Clear: All weapons cleared (any misfires removed); all weapon systems inspected by vehicle commander or first line supervisor; ammo may be in ready boxes.

Attack Helicopters--Aircraft downloaded; TOW launchers empty, including ATWESS.

BFVs--25mm Feeder Assembly disconnected, cleared, timed, and reinstalled; ammunition downloaded; TOW launchers lowered and empty, including ATWESS.

MLRS--Pods on launcher with LLM in stowed position.

MICLIC--Charge and rocket loaded and secured; rocket head pin and rocket electrical cable disconnected.

GVLLD--Inhibiter plug installed and power switch off with handle locked in "up" position

Reference: NTC ROE, para 3-12, 1 NOV 01



WEAPONS SAFETY POSTURE



Green: All weapons unloaded, breach opened, and tubes cleared,
including ATWESS.

Attack Helicopters--Tubes/launchers may be loaded; 30mm not visible in flex chute with gun cannon plug disconnected; M2 .50 cal unloaded.

BFV--Manual and electrical safes engaged; ammunition may be uploaded in feeders for 25mm, but “ghost round” not cycled; TOW launchers lowered and empty, including ATWESS.

Claymore/Demo--Blasting caps inserted and system tested, firing device not attached.

MLRS--Pods on launcher with LLM in stowed position.

MICLIC--Tie-down straps removed from MICLIC system; rocket head pin installed; rocket electrical cable connected.

Reference: NTC ROE, para 3-12, 1 NOV 01



WEAPONS SAFETY POSTURE



Red Direct: All direct fire weapons may be loaded; systems on safe
Red Direct will not be granted until the BCT/TF Commander has
100% accountability of all personnel and equipment IAW ROE.

Attack Helicopters--Electrical arm switches on safe or standby.

BFVs--Electrical safe engaged with ghost round cycled;
missiles/ATWESS loaded in launcher.

M1s--Battle Carry per unit SOP, electrical and manual safe engaged.

Machine Guns/COAX/MK19--Manual safe with bolt locked to the rear.

Claymore/Demo--Firing device connected on safe with blasting cap
inserted.

Javelin/AT4/Stinger/Dragon--Configured for firing with electrical and
or manual safe engaged.

MICLIC--May raise rocket

Reference: NTC ROE, para 3-12, 1 NOV 01

**LIVE
FIRE**



WEAPONS SAFETY POSTURE



Red Direct for Lasing: Laser systems are direct fire weapons; lasers can be used without eye-safe filters in Live Fire area of operations; clearance to lase requested and granted in same manner as direct fire weapons systems; units must request “Red Direct for Lasing” when not in “Red Direct” status; when granted, lase only upon OC verification area is clear.

Red Indirect: Field artillery and mortars can execute fire missions against cleared targets in support of Live Fire operations after receiving clearance from higher headquarters; operational graphics, FSCMs, and air corridors must be posted in FDCs.



WEAPONS SAFETY POSTURE



Check Fire: Cease all firing immediately; electrical safe engaged

Check Fire Freeze: (FA/mortars only), cease firing immediately and evacuate all guns immediately

Cease Loading: (FA/mortars only), continue firing current rounds in tube only; do not load additional ammunition



LIVE FIRE C²

- 52d Division TAC (DTAC) C2
- RESPONSIBILITIES
 - Verify 100% accountability and safety procedures
 - Control weapon safety posture
 - Manage division A²C² program



WEAPON SAFETY POSTURE AUTHORIZATION

- 52d ID TAC issues RED DIRECT to BCT upon request after verification from the covering Observer/Controller team.
 - 100% accountability of all personnel required.
 - Encompasses all BCT units/weapon systems except Live Stinger, Hellfire, and 2.75" rockets.
- BCT is not authorized RED DIRECT after EENT (for offense) except for Army aviation rotary wing aircraft (deep); with ADC (M) approval 7.62 Sniper and light Infantry.
- ~~Once~~ ^{Once} RED DIRECT, units will not move any



WEAPON SAFETY POSTURE AUTHORIZATION

- BCT requests RED DIRECT for separate events/activities if not already RED DIRECT -
 - Lasing
 - Mortar Lanes
 - MP Live Fire (Challenger)
 - FARP Live Fire
 - BSA Defense
 - Fire
 - Road Cratering missions
 - Screen/Zero Range
 - UH60 Door Gunnery
 - Limaville
 - CSAR
 - Convoy Ambush Live
- 100% personnel/equipment accountability must be maintained throughout Live Fire week.



WEAPON SAFETY POSTURE AUTHORIZATION

RED INDIRECT -

- Same basic procedures as RED DIRECT.
- Maneuver graphics and the following FSCMs must be posted/verified:
 - All no-fire areas/restrictive fire areas
 - All airspace coordination areas
 - All air corridors
- Unit must adjust fires if the 5 requirements for accurate predicted fires are not met.
- No overhead mortar fires.
- Mortars must fire 3 rounds to settle base plates.



WEAPON SAFETY POSTURE AUTHORIZATION

GREEN & CLEAR -

- Upon destruction/penetration of the enemy threat (offense/counter-recon/defense/separate events).
- BCT decision - based on enemy threat/tactical situation.
- Report change of WSP to 52d TAC.
- Once the BCT reports GREEN & CLEAR, it must again go through the procedures to request RED DIRECT/INDIRECT.
- 52d TAC will only order the BCT to go GREEN & CLEAR if an emergency occurs or at EENT for offensive operations.



INDIRECT FIRE MSDs

ARTILLERY MINIMUM SAFE DISTANCES

	<u>LOW ANGLE</u>	<u>HIGH ANGLE</u>
105 MM	800M	800
M		
155 MM	800M	1,100 M
<u>CHG 3 GB/WB& RB</u>	1,100 M	1,300 M

MORTAR MINIMUM SAFE DISTANCES

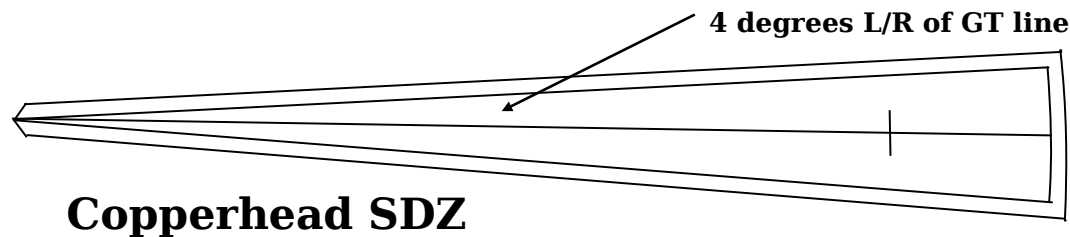
60 MM	800 M
(300 M with registration or direct lay)	
81 MM	800 M
(500 M with registration or direct lay)	



COPPERHEAD/RAP



- Not authorized for overhead fires
- Safety of use message limits copperhead firing to ballistic mode only. (Max rg 11,650m)





CLOSE AIR SUPPORT



- 52d ID (M) will use “push CAS”. Submit preplanned CAS requests to G3 Air NLT 1000 hrs day prior to execution
- Formal ACAs requested 24hrs prior to execution on ACO
- Max altitude 15 KM; min altitude 10 KM for formal ACAs
- Informal ACAs using lateral, time and altitude separation are allowed during the LFX.
- All activation/deactivation of ACAs must be approved by DIV FSE
- Only direct control is authorized during the LFX

– **Positive ID of target** (Target less than 7,500 meters of FLOT requires

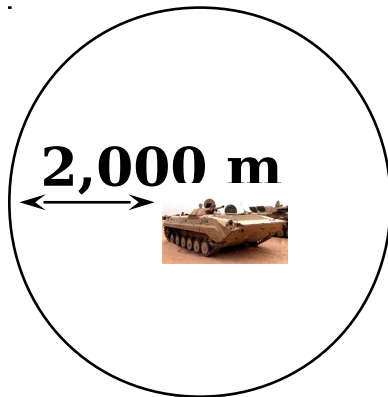
**LIVE
FIRE** physical mark)



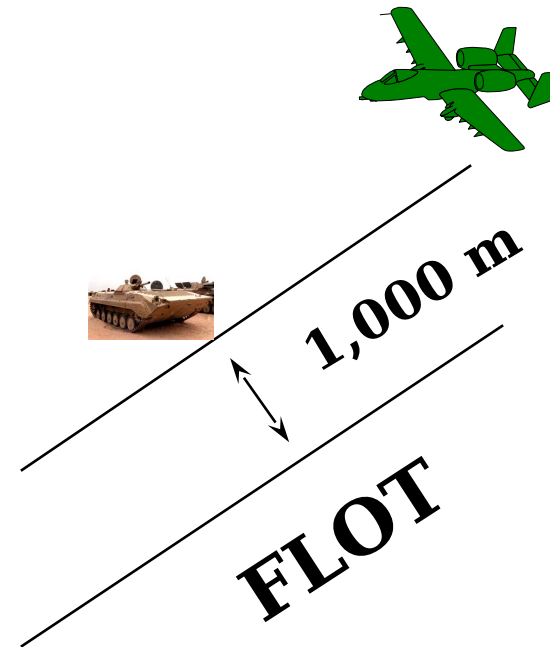
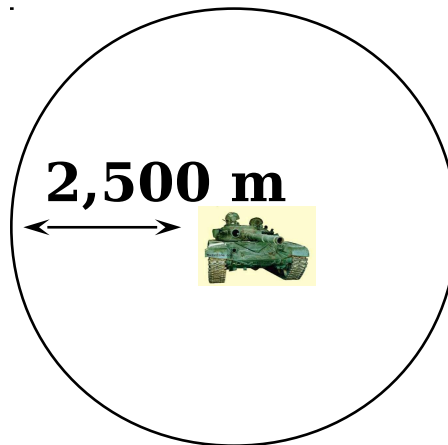
CLOSE AIR SUPPORT (MSDs)



MK -82



MK -84



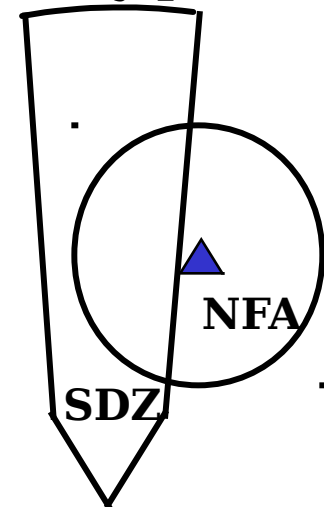
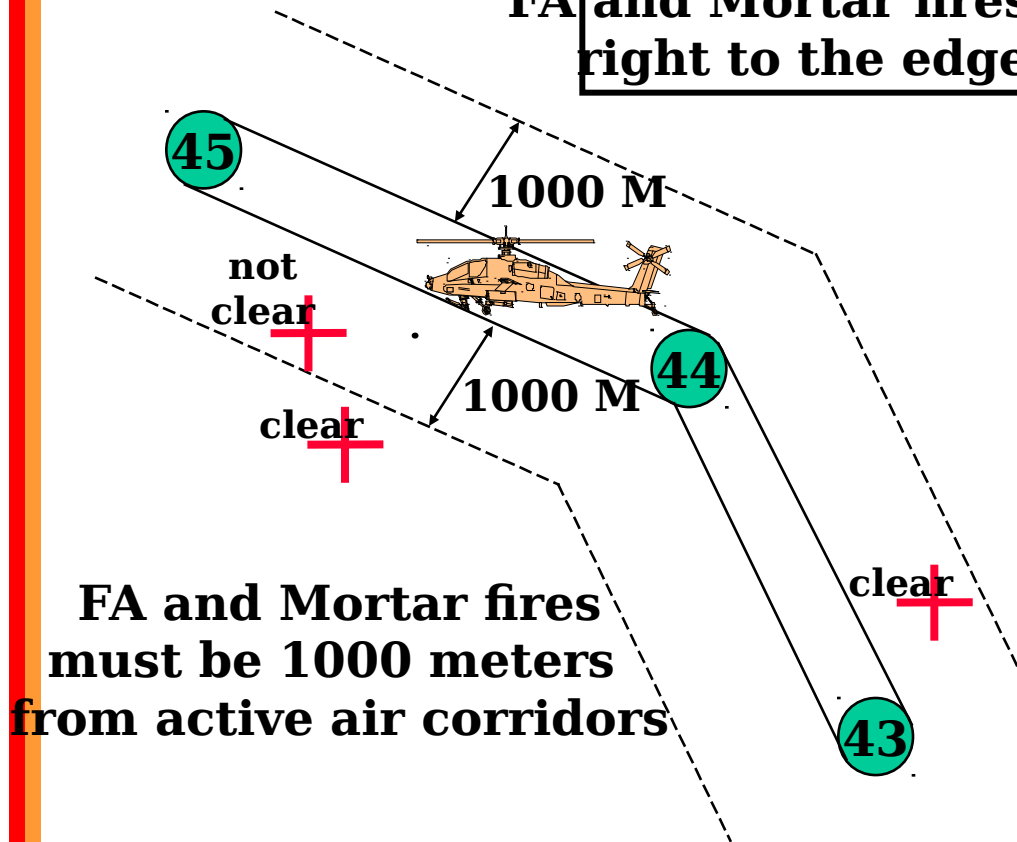




Common Questions

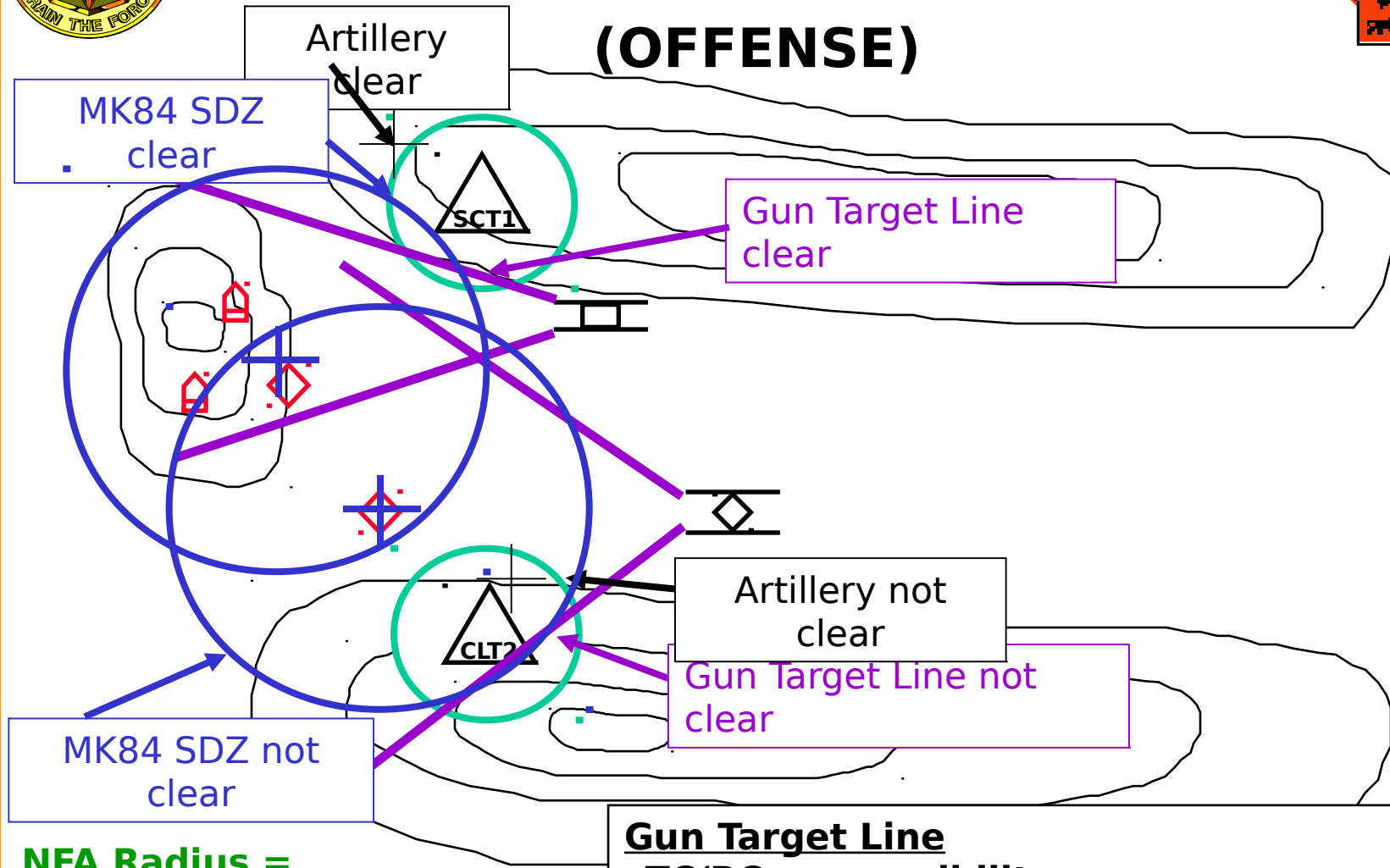


Mortar overhead fire and direct fire SDZs can violate an NFA up to the location occupied by personnel





SURFACE DANGER ZONE (OFFENSE)

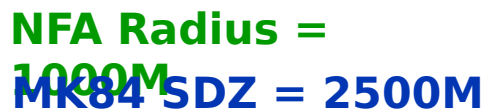


NFA Radius =
1000M
MK84 SDZ =
2500M

FIRE

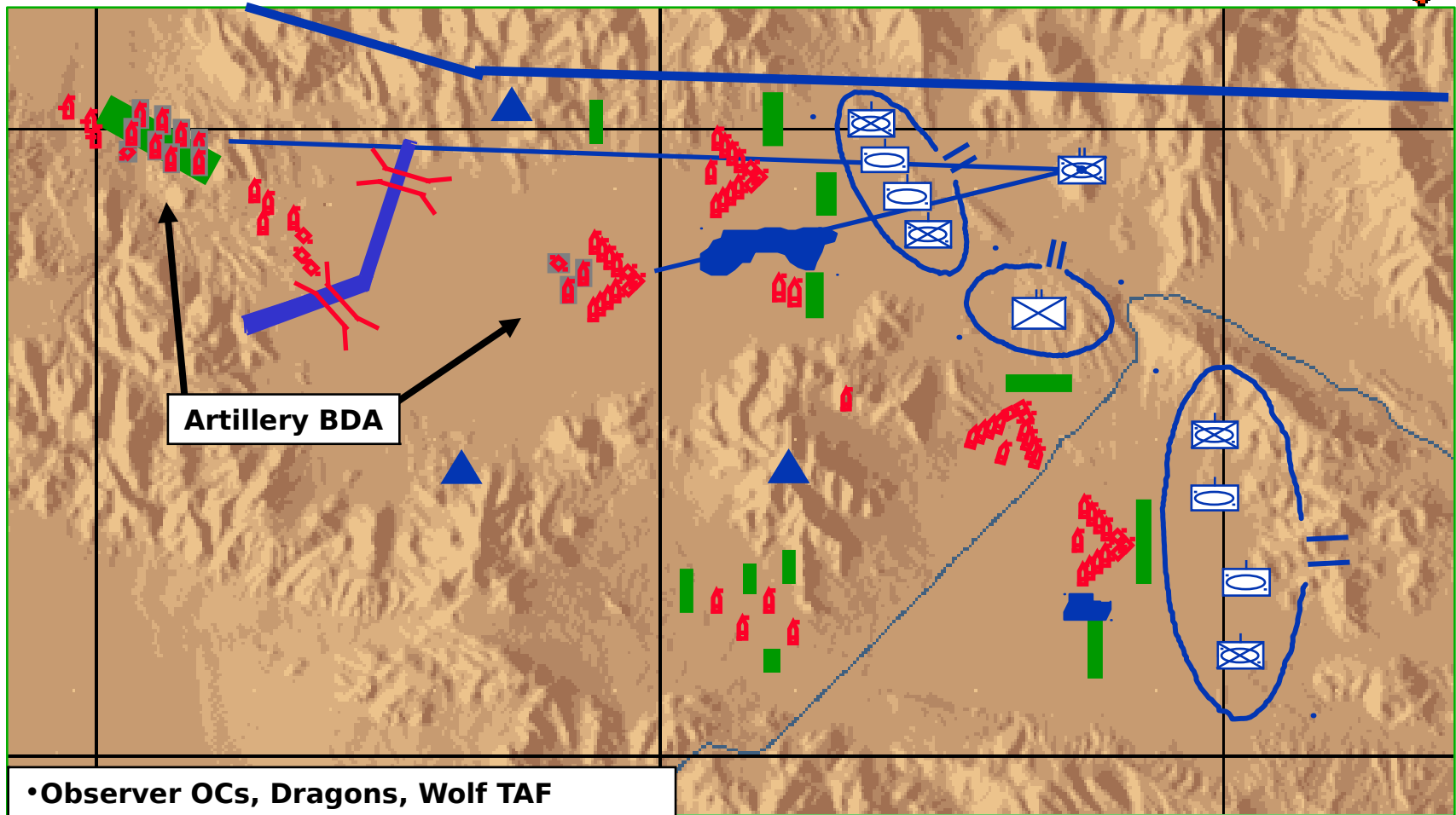
Gun Target Line

- TC/BC responsibility
- Five finger and nine finger rules are in effect



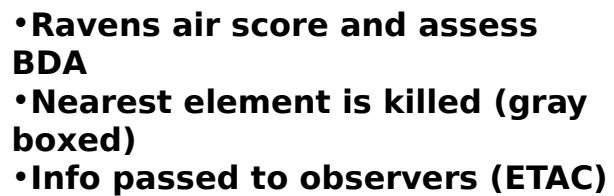


ARTILLERY



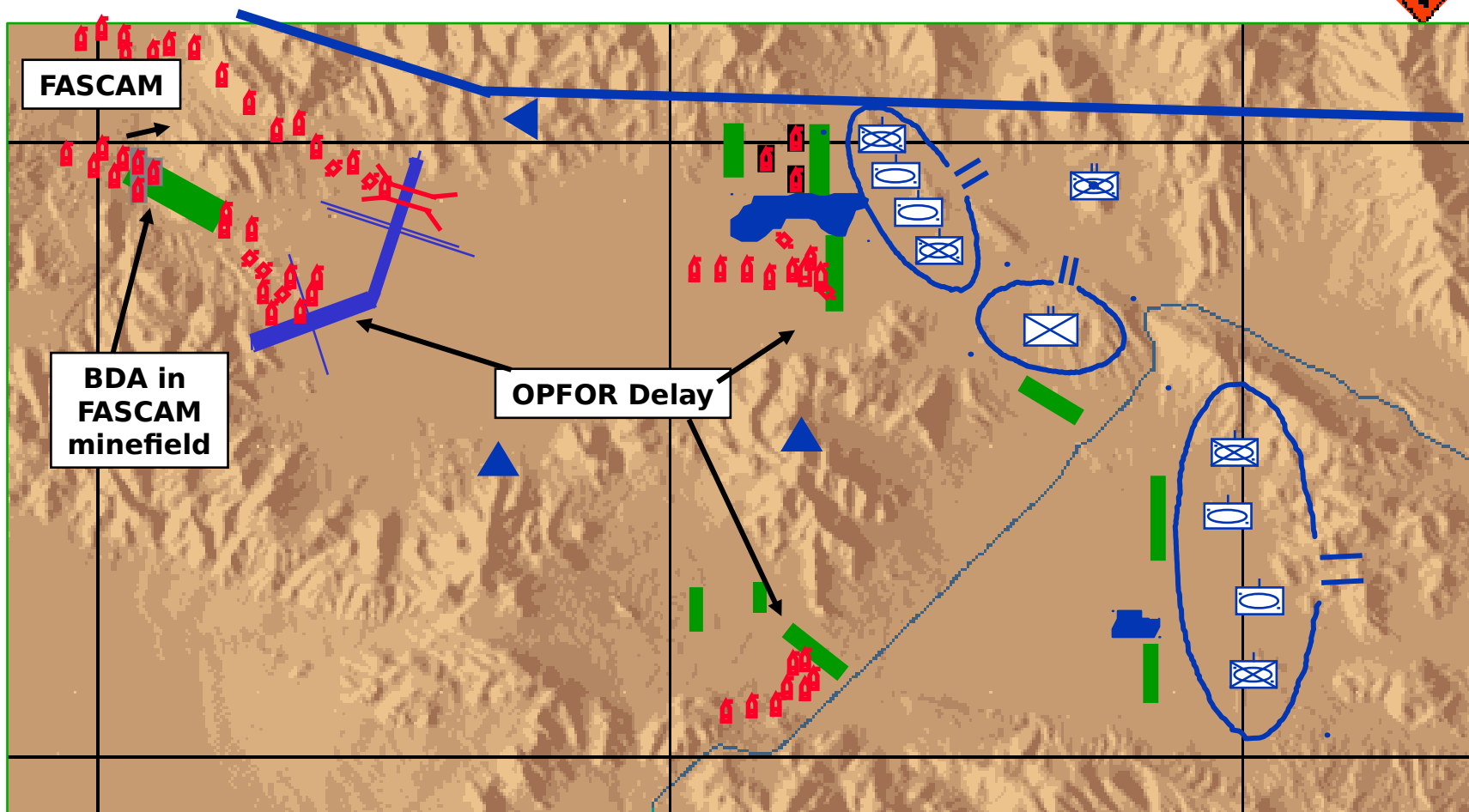
- Observer OCs, Dragons, Wolf TAF assess BDA
- OPFOR then killed (gray boxed)
- Info passed to observers

FIRE





OBSTACLES



Successful engineering effort results in enemy delay times and BDA.



CSS

- ROE (same as Force on Force)
- MILES CASUALTIES
Go green & clear
Tube up and pointed toward the enemy
Kevlar/CVC and body armor remain worn
Player chain of command responsible, w/OC spot check
- CASEVAC (BLUEFOR) (NOTE 1)
 - Offense - starts when FLOT has advanced far enough ahead of casualties to allow medics to safely evacuate casualties

Reference: (1) NTC ROE para 7-17 (1a-b) 1 NOV 01

LIVE
FIRE

Defense - starts when BCT is GREEN & CLEAR for direct



SIGNAL

- No cell phones, Family Service Radios, Motorola HT1250's, ICOM IC-F4S, CBs during Live Fire week
- ICOM IC-F3S and PRC-127s
(approval by NTC Spectrum Management required)
- Frequency Hopping during Live Fire authorized



LIVE FIRE KEYS TO SUCCESS



- Live Fire Effects Safety Brief:
 - 100% of BCT
 - All other personnel conducting Live Fire operations (FARP, BSA, MP, etc)
- Screen M1/zero M2/test fire .50 cal as early as possible--Showstoppers: ammo, target prep, TCPs, medics
- Utilize the Live Fire LNOs (Dragon Team)
- Use the Division Enemy SITEMP/intell annex
- Do not be misled by past NTC Live Fire experience: Scenarios, targetry, and obstacles have changed
- Integrate all combat multipliers
- Use SDZ templates to shape options



LIVE FIRE PRACTICAL EXERCISE



RSOI 2 @ 1530 in BLDG 599 for the following:

Assistant S3's

S3 Air

BDE FSO

BN FSO's

ALO/ETAC's

FATAL LIVE FIRE ACCIDENTS

3 soldiers have died at NTC from direct fire incidents:

24 JAN 82 Soldier struck by 7.62mm bullet

08 DEC 84 Soldier struck by .50 cal bullet

17 JUN 98 Soldier in M113 struck by 25mm round



LIVE FIRE LEADER BRIEFING

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